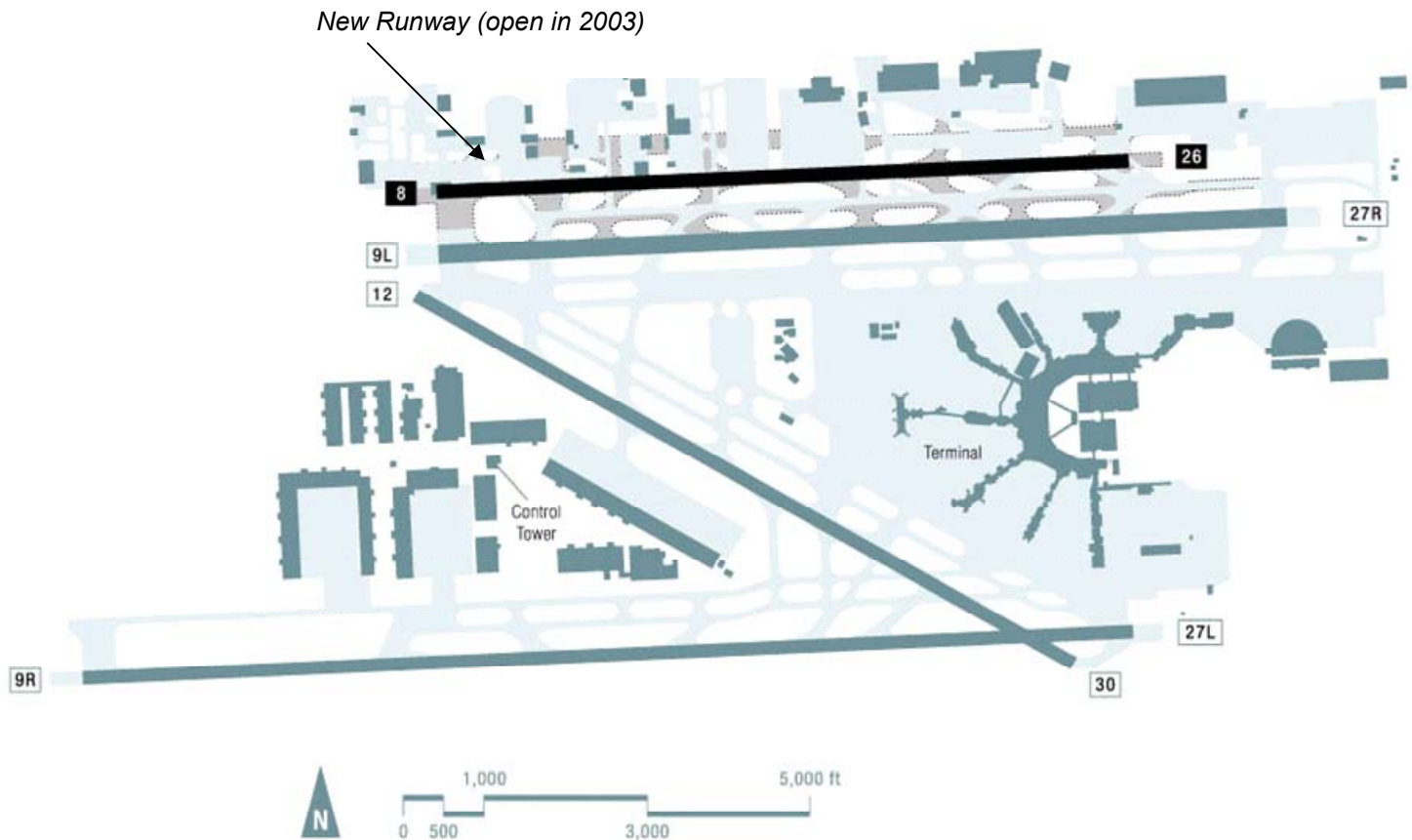


MIAMI – Miami International (MIA)



Note: as of 15 April 2004 the runway numbers have changed

MIAMI – Miami International Airport (MIA)

Benchmark Results

- The capacity benchmark for Miami International Airport today is 116-121 flights per hour (arrivals and departures) in Optimum weather, when visual approaches can be conducted.
- The benchmark rate is 104-118 flights per hour in Marginal conditions, and 92-96 flights per hour in IFR conditions, for the most commonly used runway configuration in these conditions. However Marginal and IFR conditions rarely occur at MIA. Throughput may be less when conditions force the use of other configurations, or during thunderstorms.
- Note that these benchmarks do not always represent balanced operations. Rather, there are more arrivals than departures in the Optimum scenarios, and more departures than arrivals in the IFR scenario. If the facility reported rates are significantly unbalanced (i.e., unequal numbers of arrivals and departures), the benchmark rates will be unbalanced as well. The facility reported rates reflect current operations at the airport during a busy hour, but such unbalanced rates cannot be sustained for extended periods.
- A new runway was opened at MIA in 2003. Although the new runway is primarily used for arrivals, it does not increase the maximum airport arrival rate. Rather it allows for more departures without reducing the arrival rate.
- As of 15 April 2004, Runway 9R/27L was renumbered 9/27, and Runway 9L/27R was renumbered 8R/26L. The new runway, 8/26, then became 8L/26R. However, the former runway numbers are used in the following table since it is based on information collected prior to the change.
- Other planned technological improvements at MIA, such as advanced TMA, CEFR, and intersecting runway procedures would increase the benchmark capacity in all conditions. The primary benefit in Marginal conditions assumes all arrivals can use CEFR to achieve visual separations. Additional operations in Optimum conditions can be achieved using intersecting runway procedures. The benefit in IFR conditions derives mainly from improved delivery accuracy that is assumed to result from advanced TMA and RNAV procedures.

These values were calculated for the Capacity Benchmarking task and should not be used for other purposes, particularly if more detailed analyses have been performed for the airport or for the individual programs.

The list of Planned Improvements and their expected effects on capacity does not imply FAA commitment to or approval of any item on the list.

MIAMI – Miami International Airport (MIA)

<i>Weather</i>	<i>Scenario</i>	<i>Configuration</i>	<i>Procedures</i>	<i>Benchmark Rate (per hour)</i>
Optimum Rate Ceiling and visibility above minima for visual approaches (2000 ft ceiling and 5 mi visibility) <i>Occurrence: 95%</i>	Today	Arrivals on 9R, 9L, 12 Departures on 9R, 9L, 12 <i>Frequency of Use: 78% in Optimum conditions</i>	Visual approaches, visual separation	116-121
	New Runway (2003)	Arrivals on 9R, 8, 12 Departures on 9R, 9L, 12		149
	Planned improvements (2013), including new runway	Same	Visual approaches, visual separation, intersecting runway procedures	154
Marginal Rate Below visual approach minima but better than instrument conditions <i>Occurrence: 3%</i>	Today	Arrivals on 9R, 9L, 12 Departures on 9R, 9L, 12 <i>Frequency of Use: 55% in Marginal conditions</i>	Instrument approaches, visual separation	104-118
	New Runway (2003)	Arrivals on 9R, 8, 12 Departures on 9R, 9L, 12		126
	Planned improvements (2013), including new runway	Same	Visual approaches, visual separation	152
IFR Rate Instrument conditions (ceiling < 1000 ft or visibility < 3.0 miles) <i>Occurrence: 2%</i>	Today	Arrivals on 9R, 9L Departures on 9R, 9L, 12 <i>Frequency of Use: 65% in IFR conditions</i>	Instrument approaches, radar separation	92-96
	New Runway (2003)	Arrivals on 9R, 8 Departures on 9R, 9L, 12		114
	Planned improvements (2013), including new runway	Same		120

NOTE: Data on frequency of occurrence of weather and runway configuration usage is based on FAA ASPM data for January 2000 to July 2002 (excluding 11-14 September 2001), 7 AM to 10 PM local time.

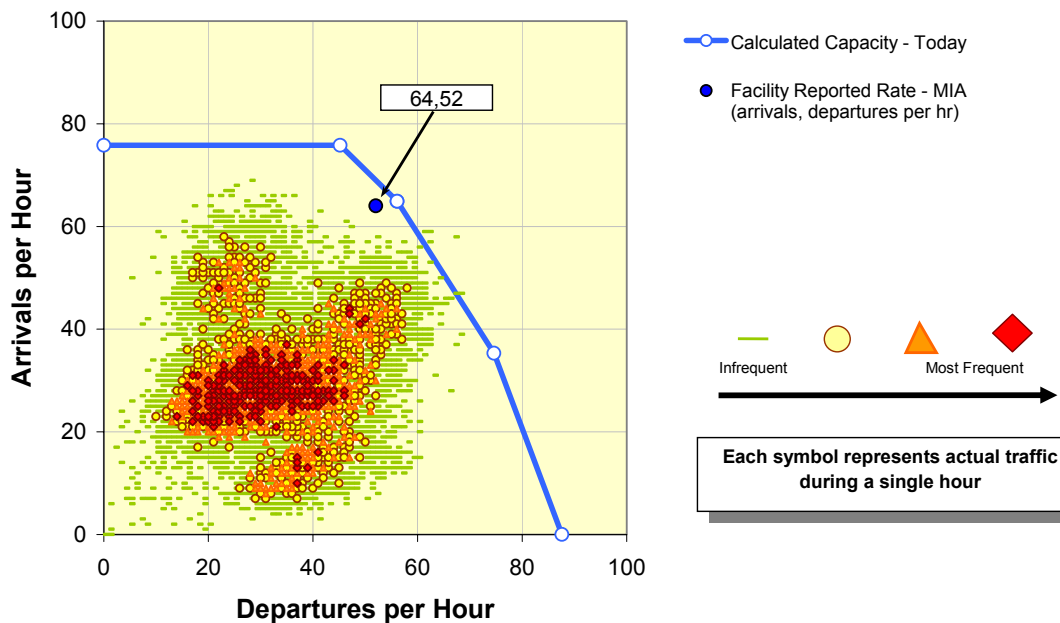
Planned Improvements at MIA include:

- CEFR, for reduced in-trail separations between arrivals in Marginal conditions.
- Intersecting runway procedures in Optimum conditions.
- Advanced TMA/RNAV, to improve delivery accuracy and help MIA consistently utilize available capacity in all conditions.

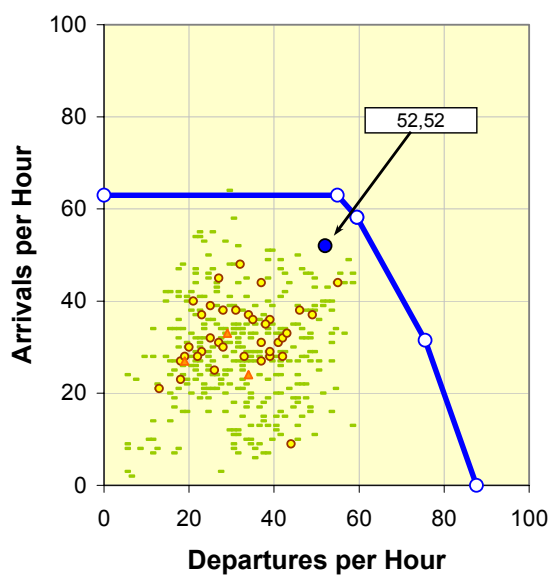
Additional information on these improvements may be found in the Introduction and Overview of this report, under “Assumptions.”

Calculated Capacity (Today) and Actual Throughput

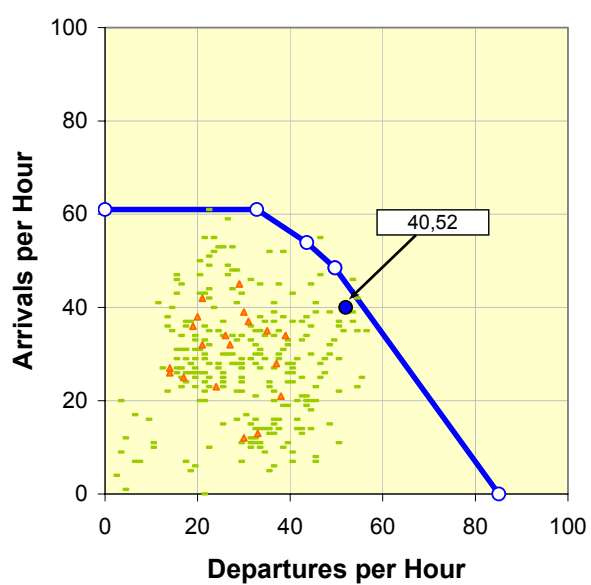
Optimum Rate



Marginal Rate



IFR Rate



Hourly traffic data was obtained from the FAA ASPM database for January 2000 to July 2002 (excluding 11-14 September 2001), 7 AM to 10 PM local time. Facility reported rates were provided by ATC personnel at MIA.